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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,411	06/07/2001	Geoffrey Foote	SYN-099	7705

7590 04/20/2004

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EXAMINER	
BAUTISTA, XIOMARA L	

ART UNIT	PAPER NUMBER
2173	14

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/877,411	FOOTE ET AL.	
	Examiner	Art Unit	
	X L Bautista	2173	

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/7/01 & 6/24/03*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,14-23,30-34 and 36-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-7,14-19,21-23,30-34, 36-45 and 47-56* is/are rejected.

7)☒ Claim(s) *4,20 and 46* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5,7,13*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 5-7, 14-19, 21-23, 30-34, 36, 37, 39-42, 44, 47-50, and 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kuribayashi* (EP 0996052 A2) and *Hardin, Sr. et al* (US 4,817,034).

Claims 1 and 17:

Kuribayashi discloses a touch sensitive device having a display screen that communicates with an activating object that reports X and Y position information (abstract; col. 1, lines 1-58; col. 2, lines 1-57; col. 3, lines 1-23). Kuribayashi teaches that data is displayed in response to a first state or second state (pen up or pen down; hovering mode or normal mode), (col. 5, lines 1-4; col. 6, lines 20-47; col. 7, lines 13-56; col. 9, lines 3-45; col. 12, lines 20-40). Kuribayashi teaches that the system's operations (data display) depend on the time interval between the

pen up motion and the pen down motion detected in a process (col. 9, lines 3-44; col. 10, lines 8-17) but does not teach that the device operates in response to an activating object being disposed in a proximate non-touching state for a selected time period. However, Hardin discloses a digitizer pad that produces signal indicative of the relative location of a cursor with respect to the surface of the pad. The pad produces a "one" together with location information when cursor 22 is in contact with digitizer pad 20 and produces a "zero" together with location information when cursor 22 is located proximate to the surface of digitizer pad, but not in contact therewith (abstract; col. 1, lines 60-68; col. 2, lines 1-44; col. 3, lines 34-9; col. 4, lines 8-35; col. 5, lines 1-8; col. 6, lines 20-38; col. 7, lines 2-15, 43-56; col. 9, lines 3-16; col. 10, lines 8-32; col. 11, lines 13-58; col. 12, lines 9-29). Therefore, it would have been obvious to one ordinarily skilled in the art at the time the invention was made to include Hardin's input processing method in Kuribayashi's method of displaying data depending on whether an object is touching or not touching a screen because the device will enter and display data only when receiving indication of the user's activity (pen up or pen down), and it also makes movement of the cursor possible without drawing a line or dots.

Claims 2, 3, 18, 19, 36, 39, and 47:

Kuribayashi teaches that the predetermined time period is of duration that

ends after the activating object is disposed in the proximate non-touching state (col. 7, lines 13-15, 27-50; col. 9, lines 3-23, 37-44; col. 10, lines 8-17).

Claims 5, 6, 21, and 22:

Kuribayashi (col. 4, lines 52-57) and Hardin (col. 3, lines 44-68) teach an inductive sensing system that employs a measurement technique with a plurality of coils that extend across the sensing area (figs. 6A, 6B).

Claims 7 and 23:

See claim 1. Kuribayashi/Hardin does not teach that data is displayed in a window. However, it would have been obvious to one having ordinary skill in the art at the time the inventions was made to use windows in Kuribayashi/Hardin's input processing method to display data because windows can be divided into several windows, each having its own boundaries and different documents, so that the user is enabled to view and interact with two or more files simultaneously.

Claims 14 and 30:

See claim 1. Kuribayashi teaches displayed additional data that allows the user to activate an object when being touched causing a first action to occur, such action (pen down, pen up) being different from a second action that would have occurred if the additional data had not been displayed (hovering mode, normal mode), (abstract; col. 1, lines 40-58; col. 2, lines 1-50).

Claims 15 and 31:

Kuribayashi teaches a smart (handheld) compact device (col. 1, lines 1-16; figs. 4, 5, 16A-16D).

Claims 16 and 32:

See claim 1. Kuribayashi teaches a user interface sensitive to an activating object such as a finger, pen, and the like (abstract; col. 1, lines 53-55; col. 12, lines 36-40).

Claim 33:

See claim 1. Kuribayashi teaches different (first, second) proximity relationships between an activating object and the display screen, and the system operates based on the sensed relationship (col. 7, lines 13-58; col. 11, lines 34-58; col. 12, lines 1-40), which occurs for a predefined period of time (col. 7, lines 13-15, 27-36; col. 9, lines 10-16, 37-44; col. 10, lines 10-17).

Claims 34 and 53-56:

Hardin teaches a proximity relationship relating to a distance between an activating object and the display screen (abstract; col. 3, lines 57-63; col. 16, lines 31-34, 55-68; col. 17, lines 9-11). Hardin teaches that contact indication may be provided by a switch (control parameter), (col. 4, lines 14-30).

Claims 37 and 44:

See claim 1. Kuribayashi teaches a pen up and pen down state; and Hardin teaches a touching (cursor in contact with the pad), proximate but not touching state (cursor is in proximity with but not touching the pad), and a third state (cursor is out of proximity of the pad), (col. 4, lines 11-28; col. 57, lines 39-44).

Claims 40, 41, 48, and 49:

Hardin teaches textual data and graphics (figs. 3A-3E).

Claims 42 and 50:

Hardin teaches that contact indication may be provided by a switch (control object) located in cursor 22 (col. 4, lines 14-30).

3. Claims 38, 43, 45, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kuribayashi/Hardin* and *Samar* (US 6,563,514 B1).

Claims 38, 45, and 52:

See claim 1. Kuribayashi/Hardin does not teach a second proximate non-touching state. However, Samar teaches a state for displaying additional information when a pointer has been hovered over a word for more than a specified time T without requiring any action from the user. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to include Samar's second proximate non-touching state in Kuribayashi/Harding's

method because the system provides the ability to maintain the same user context while providing useful supplemental information; the additional information is displayed without the user having to select an object, open a menu, or navigate to find the information.

Claims 43 and 51:

See claim 38. Kuribayashi/Hardin does not teach that the displayed data includes additional data. However, Samar discloses a software program that configures a computer system on which it executes to access information on an item over which a pointer has hovered for a preset time (abstract; col. 1, lines 59-67; col. 2, lines 40-43, 53-59). Samar teaches a bubble software capable of, displaying additional data when a pointer is hovered over a word for more than a specified time T, identifying a pointer location, identifying information being displayed on the display device, providing context-relevant information, etc. (col. 6, lines 20-67; col. 7, lines 1-55). Thus, it would have been obvious to an artisan in the art to include Samar's teaching of displaying additional information in Kuribayashi/Hardin's input processing method because it provides the user with hints, help or additional information about a word or item without requiring further action from the user.

Allowable Subject Matter

4. Claims 4, 20, and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: Prior art of record does not teach or fairly suggest hiding a portion of displayed data in response to an activating object being disposed in the touching state as recited in claims 4 and 46; and controlling the data on the display screen to hide second data responsive to the activating object being disposed in a proximate non-touching state as recited in claim 20.

Hardin (US 4,817,034) discloses a digitizer pad that produces location information when the cursor is in the touching state and a proximate non-touching state.

Louis et al (US 6,674,425 B1) discloses a touchpad that displays data when a pressure sensitive surface is physically contacted by a user's finger or stylus.

Rafii et al (US 6,614,422 B1) discloses a method for entering digital data to a portable device. The portable computer can highlight an image of a key as the key is touched or the user's finger is sufficiently close to touching the key, and as the key is pressed or typed upon, the device can highlight the key using a different color or contrast.

Kent et al (US 6,492,979 B1) discloses a method for discriminating against false touches in a touchscreen system. Kent teaches that the use of the force sensor eliminates the possibility of responding to a touch prior to actual touch, that is, when the user's finger or hand is merely close to the screen but not yet touching the screen.

Greanias et al (US 5,149,919) discloses a stylus sensing system having a contact detecting mode has been added to eliminate false contact position measured between strokes when the stylus is proximate to but not in contact with the overlay.

Hardin, Louis, Rafii, Kent, and Greanias fail to teach hiding a portion of data when the cursor is in a touching state, and hiding second data when the cursor is in the proximate non-touching state.

Conclusion

4. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach a display screen configured to report position information, communicate with an activating object disposed in a touching state and a proximate non-touching state.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to X L Bautista whose telephone number is (703) 305-3921. The examiner can normally be reached on Monday-Thursday (8:00-18:00), Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

X L Bautista
Patent Examiner
Art Unit 2173

xlb
April 14, 2004